

## AFM-20DSP

20-Port Audio Matrix with DSP and Interchangeable Inputs & Outputs

| HDMI | Speakers | Ethernet - RJ-45 | 4K/60 UHD (4:2:0)



AFM-20DSP is an advanced, professional audio matrix switcher with 20 analog ports that can be configured as inputs or outputs according to preset I/O configurations. AFM-20DSP includes multi-channel DSP, built-in 2x60W @ 8 $\Omega$  and 1x120W @ 70V / 100V power amplifier, 4x4 Dante interface, HDMI embedding and de-embedding, and S/PDIF. The comprehensive and user-friendly graphic interface makes configuring every detail of your audio system intuitive and easy

## **FEATURES**

Advanced Audio Matrix Switcher - Professional, studio grade signal conversion technology, Including the latest generation 32-bit advanced Digital Analog Converter architecture to achieve excellent dynamic performance and improved tolerance to clock jitter. Maintains the quality of the original audio signal with selectable sampling rates up to 96 kHz. Flat frequency response, unmatched sonic performance, excellent signal to noise ratio, and extraordinarily low distortion levels

Wide Range of I/O Formats - Includes 20 analog ports, 4x4 Dante interface, HDMI input and output, and S/PDIF input and output

Multi-Channel Processing - Provides DSP (Digital Sound Processing) that enables simultaneous processing of all input and output signals

Built-in Power Amplifier - 2x60W @ 8Ω and 1x120W @ 70V / 100V power amplifier

Maximum Flexibility - Customize the analog port configuration: use the default 12 x 8 I/O matrix configuration or select from one of the many other preset I/O configurations. Route any input to any output, even between different formats (for example, route an analog input to an S/PDIF output). Control volume and DSP per port. Route any of the ports to the power amplifier

Simple and Powerful Maestro Room Automation - Intuitive user interface enables you to fully automate your meeting room elements. Configure lights, shades, devices and more to be activated by an extensive range of triggers, including input/output connectivity, routing, and button pressing. By minimizing user intervention, Maestro room automation saves meeting prep time and minimizes human error before presentations

Intuitive and Comprehensive Configuration and Control - Via a powerful, user-friendly graphic interface, set volume (gain and attenuation) and DSP per input; execute routing and select line in, mic in, phantom power or line out on each port; configure master level and more. Control signal routing, volume and other basic settings using API commands via RS-232 communication transmitted by a PC, touch screen system or other serial controller

Audio De-embedding - De-embeds the audio signal from the HDMI input for routing to any of the outputs or for routing to the loop output

Programmable - Supports up to 10 global presets per I/O configuration plus 10 mixer snapshot presets

Easy, Cost-Effective Maintenance - LED indicators for main power, line in/out, mic in, clipping, power amp, Dante sync, and HDMI, enable easy local maintenance and troubleshooting. Local firmware upgrade via the USB type-A port ensures lasting, field-proven deployment

Easy Installation - 19" enclosure for rack mounting a unit in a 1U rack space with included rack ears and universal 100–240V AC power connection



## TECHNICAL SPECIFICATIONS

I/O 20 balanced Mono Audio: On 3-pin terminal blocks

Inputs 1 HDMI: On a female HDMI connector

1 S/PDIF: On an RCA connector

Outputs 1 HDMI: On a female HDMI connector

1 S/PDIF: On an RCA connector

120W Amplifier: On a 4-pin large terminal block

Ports 1 Dante: On an RJ-45 female connector

1 mini USB: On a female mini USB-A connector

1 RS-232: On a 3-pin terminal block

1 Ethernet: On an RJ-45 female connector

Amplifier Input Sensitivity Attains full power @ 0.3V (-10dBV)

Output Power 2 x 60W @  $4\Omega$  or  $8\Omega$ , 1 x 120W @ 70V or 100V

Amplifier Type Class D

Maximum Voltage Gain 26dB SE / 32dB BTL

Dynamic Range 119dB

Frequency Response 20Hz to 20kHz @  $\pm$ -1dB

S/N Ratio 80dB — 10dBV, 20 Hz — 20 kHz

Audio THD + Noise THD+N (1kHz @ 1W) 0.003 %

Audio 2nd Harmonic 0.08% @ 75W RMS @  $4\Omega$  6.67kHz

Video Max Bandwidth: 10.2Gbps (3.4Gbps per graphic channel)

Max Resolution: 4K UHD @60Hz (4:2:0) 24bpp resolution

Compliance: HDMI and HDCP 1.4

User Interface Front Panel LEDs: 1 status, 20 analog audio ports, 4 Dante I/O, HDMI embed,

HDMI de-embed, 2 S/PDIF I/O, and 2 amplifier channels

Control RS-232 Baud Rate: 115200

Supported Web Browsers Windows: Chrome

Power Consumption: 104VA max

Source: 100-240V AC 50/60Hz

Environmental Conditions

Operating Temperature: 0° to +40°C (32° to 104°F)

Storage Temperature: -40° to +70°C (-40° to 158°F)

Humidity: 10% to 90%, RHL non-condensing

Regulatory Compliance (Standards Compliance) Safety: CE

Environmental: RoHs, WEEE

Enclosure Size: 19" 1U

Type: Aluminum

Cooling: Fans

Accessories Included: Power cord